

### **Amendments to the Claims**

Please make the following amendments to the Claims:

1-11 (Cancelled)

12. (Previously amended) A process for predicting when maintenance is required for a scanner, the process comprising:

tracking in a scanner a quality parameter history in a scanner;

predicting when maintenance is required in the scanner based on the quality

parameter history, wherein predicting when maintenance is required

further comprises using a quality parameter history variable and a quality

parameter time variable to determine a quality parameter trend and

extrapolate the trend to determine when the quality parameter trend will

cross a quality parameter limit; and

notifying a user when maintenance is predicted to be required in the scanner based

on the quality parameter trend.

13. (Original) The process of claim 12, wherein tracking a quality adjustment history further comprises recording a quality parameter history variable and a quality parameter time variable after a specified period of time.

14. (Original) The process of claim 12, wherein tracking a quality adjustment history further comprises recording a quality parameter history variable and a quality parameter time variable after a specified number of images have been scanned.
15. (Original) The process of claim 12, wherein tracking a quality adjustment history further comprises modifying a quality parameter history variable by an amount that a quality parameter change variable is different than a quality parameter threshold and to record a quality parameter time variable when the quality parameter change variable is modified.
16. (Previously amended) The process of claim 12, wherein predicting when maintenance is required further comprises using the quality parameter history variable and the quality parameter time variable in a quality parameter function to determine the quality parameter trend and extrapolate the trend to determine:
- when the quality parameter trend will cross a quality parameter notification limit;
  - when the quality parameter trend will cross a quality parameter change limit; and
  - the difference between when the quality parameter trend will cross the quality parameter notification limit and the quality parameter change limit.
17. (Original) The process of claim 16, wherein the quality parameter function comprises a quality parameter straight-line approximation function configured to determine a straight-line approximation of the quality parameter trend.

18. (Original) The process of claim 16, wherein the quality parameter function comprises a quality parameter first order curve fitting approximation function configured to determine a curved-line approximation of the quality parameter trend.
19. (Original) The process of claim 12, wherein notifying a user when maintenance is predicted to be required further comprises sending a notification signal when a quality parameter trend crosses a quality parameter notification limit, the notification signal comprising an estimated time difference between when the quality parameter trend crosses the quality parameter notification limit and when the quality parameter trend crosses a quality parameter change limit.
20. (Original) The process of claim 12, wherein the quality parameter is selected from a group consisting of an average brightness, a maximum brightness, a video gradient, and a contrast.
21. (Previously Amended) A process for predicting maintenance for a scanner, the process comprising:
- tracking in a scanner a quality parameter history;
  - using within the scanner a quality parameter history variable and a quality parameter time variable in a quality parameter function to determine a quality parameter trend and extrapolate the trend to determine:

when the quality parameter trend will cross a quality parameter notification limit;

when the quality parameter trend will cross a quality parameter change limit; and

the time difference between when the quality parameter trend will cross the quality parameter notification limit and the quality parameter change limit; and

sending from the scanner a notification signal when a quality parameter trend crosses a quality parameter notification limit, the notification signal comprising an estimated time difference between when the quality parameter trend crosses the quality parameter notification limit and when the quality parameter trend crosses a quality parameter change limit.

22. (Original) The process of claim 21, wherein quality parameter is selected from the group consisting of average brightness, maximum brightness, video gradient, and contrast.

23-24 (Cancelled)